

## Recovery Plan Action Status

**Plan Name: Final Recovery Plan for the St. Andrew Beach Mouse**

**Plan Status: Final**

**Plan Date: 28-Dec-10**

**Lead Agency: USFWS**

**Lead Office: Panama City Ecological Services Field Office**

**(850)**

**769-0552 )**

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.1.1	Establish monitoring program for known populations	Ongoing Current			Florida Park Service, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.1.2	Establish monitoring program for reestablished populations	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.2.1.1	Prepare reintroduction plan for reestablishment of mice at St. Joe Beach	Not Started			Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.2.1.2	Prepare reintroduction plan for reestablishment of mice at Cape San Blas	Not Started			Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.2.1.3	Determine which existing population(s) is best source for reestablishment projects	Not Started			Florida Park Service, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	1.2.1.4	Translocate St. Andrew beach mice to St. Joe Beach and Cape San Blas	Not Started			Eglin Air Force Base, U.S. Fish and Wildlife Service, Region 4, Ecological Services, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.2.2.1	Identify additional, potential reestablishment sites	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.2.2.2	Prepare feasibility study for establishing populations at additional reestablishment sites, if additional potential sites are found	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.2.2.3	Implement a captive breeding feasibility study	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.3.1	Investigate genetic differences between Choctawhatchee beach mice on West Crooked Island and St. Andrew beach mice on East Crooked Island	Not Started			U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.3.2	Conduct further genetic analyses of historic populations on Crooked Island	Not Started			U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	1.3.3	Further investigate the genetic variation within and among St. Andrew beach mice populations	Not Started			U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.1.1	Map suitable habitat throughout range	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.1.2	Determine condition of suitable habitat	Not Started			Eglin Air Force Base, Florida Park Service, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.1.3	Determine occupied and unoccupied suitable habitat	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.2.1.1a	Map sites where dunes are impacted by pedestrians and determine appropriate sites for public access	Not Started			Bay County, Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.2.1.1b	Install boardwalks or appropriate dune crossovers at all public access sites without boardwalks	Not Started			Bay County, Florida Park Service, Gulf County, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.2.1.1c	Investigate other methods of providing beach access that protects the dunes and survives storm events	Not Started			Florida Park Service, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.2.1.2a	Identify developments in need of boardwalks	Not Started			Bay County, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.2.1.2b	Establish boardwalks where the needs have been identified	Not Started			Bay County, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.2.2.1	Map dunes impacted by vehicular driving	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.2.2.2	Continue enforcement efforts, increase enforcement, and measures taken where necessary	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.2.3	Establish or continue monitoring program to document impacts to dunes from vehicular driving and pedestrian crossing	Not Started			Apalachicola National Estuarine Research Reserve, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.2.4	Research threat feral hogs pose to beach mice habitat and implement removal program if deemed necessary	Not Started			Universities and/or other non-government, USDA Wildlife Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.3.1	Map dune systems in need of restoration	Not Started			Apalachicola National Estuarine Research Reserve, Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.3.2	Develop restoration plan for dune systems on public lands	Not Started			Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.3.3	Restoration of dune systems on public lands	Not Started			Eglin Air Force Base, Florida Park Service, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.3.4	Develop or update existing restoration guidance for dune systems on private lands	Not Started			Apalachicola National Estuarine Research Reserve, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	2.3.5	Restoration of dune systems on private lands	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County, St. Joe Company	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.3.6	Establish a monitoring program to assess the effectiveness of restoration efforts	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.4.1	Investigate options for shoreline erosion protection if monitoring indicates a threat.	Not Started			Florida Department of Environmental Protection	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	2.4.2	Implement option(s) for shoreline erosion protection, if deemed feasible	Not Started			Florida Department of Environmental Protection	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	3.1.1	Identify areas where cats are present	Not Started			Florida Park Service, Tyndall Air Force Base, St. Joe Company	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	3.1.2	Continue to implement cat removal program on public lands	Not Started			Eglin Air Force Base, Florida Park Service, Tyndall Air Force Base, USDA Wildlife Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	3.1.3	Establish cat removal program on lands without an established program	Not Started			USDA Wildlife Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	3.1.4	Monitor effectiveness of free ranging cat (domestic and feral) removal efforts	Not Started			USDA Wildlife Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	3.2	Research degree of threat non-native predators pose to beach mice and implement or curtail removal program as appropriate	Not Started			Universities and/or other non-government, USDA Wildlife Services	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	4.1.1	Work with Bay County to provide protection of all beaches and dunes, within the county, from vehicular driving	Not Started			Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	4.1.2	Work with Bay and Gulf counties to adopt a feral cat removal program and mechanism(s) prohibiting feral cat colonies and free-ranging cats	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	4.1.3	Work with Bay and Gulf counties, where applicable, to require boardwalk access to all beaches from single-family, multi-family, and commercial developments	Not Started			Apalachicola National Estuarine Research Reserve, Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	4.1.4	Work with Gulf and Bay counties, where applicable, to establish regulations for residential construction within the primary, secondary, and scrub dunes that minimize impacts to dunes and provide for connectivity of beach mice habitat	Not Started			Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	4.1.5	In partnership with Gulf and Bay counties, the Service consults on all development within the coastal dune system to provide guidance to the landowner on ways to minimize impacts to coastal dune system	Not Started			Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	4.1.6	Monitor and enforce compliance with newly established ordinances for land development, cats, dune vehicular driving, and boardwalks	Not Started			Bay County, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	4.1.7	Determine, in the Service's review, whether the designation of CBRA units P30/P30P met the definition of the Act and/or whether there was a technical error in mapping at time of designation	Not Started			U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	5.1.1	Develop and implement emergency response plan	Not Started			Apalachicola National Estuarine Research Reserve, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	5.1.2	Establish monitoring plan for effectiveness of emergency response plan	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.2.1.1	Install animal proof garbage containers on public lands and public beach access sites	Not Started			Bay County, Eglin Air Force Base, Florida Park Service, Gulf County, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.2.1.2	Work with private landowners to remove or minimize those factors that attract house mice	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	



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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	5.2.1.3	Monitor effectiveness of conservation efforts to reduce occurrence of house mice within beach mice habitat	Not Started			Florida Park Service, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	5.2.2.1	Conduct research on competitive effects of house mice on beach mice	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	5.2.2.2	Research conditions of coastal dune habitat inhabited by house mice	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.3.1.1	Determine what artificial lighting regimes have the greatest and least effect on beach mice behavior	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	3	5.3.1.2	Determine effects of artificial lighting on long term survival of beach mice	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.3.1.3	Investigate the effects of artificial lighting relative to fragmentation of beach mouse habitat at the landscape level	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.3.2.1	Install approved sea turtle lighting or dark sky lighting within the dunes on public lands	Not Started			Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.3.2.2	Work with public land managers to develop plans for their areas that addresses artificial light pollution in coastal dune systems on public lands	Not Started			Eglin Air Force Base, Florida Park Service, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.3.2.3	Work with private land owners and local governments in coastal areas to replace conventional, artificial lighting with sea turtle or wildlife lighting	Not Started			Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.4.1	Develop a management plan to prevent the hybridization of Choctawhatchee beach mice and St. Andrew beach mice at West and East Crooked Island, respectively, if deemed to pose a threat	Not Started			Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	5.4.2	Implement management plan to prevent the hybridization of Choctawhatchee beach mice and St. Andrew beach mice at West and East Crooked Island, respectively, if deemed to pose a threat	Not Started			U.S. Army Corps of Engineers, Mobile District, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Tyndall Air Force Base	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	6.1.1	Investigate outreach materials/efforts currently available and determine their target audience	Not Started			Apalachicola National Estuarine Research Reserve, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	6.1.2	Identify areas/issues are not being addressed by current outreach materials/efforts	Not Started			Apalachicola National Estuarine Research Reserve, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	6.1.3	Determine effectiveness of existing outreach efforts	Not Started			Apalachicola National Estuarine Research Reserve, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	

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St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	6.1.4	Develop a coordinated outreach program effort for various target audiences	Not Started			Apalachicola National Estuarine Research Reserve, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Universities and/or other non-government	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	2	6.2	Continue outreach efforts that increase the public's awareness of factors relating to identified threats to the St. Andrew beach mice	Not Started			Apalachicola National Estuarine Research Reserve, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Region 4, Ecological Services	Work type not yet selected	Labor type not yet selected	
St. Andrew beach mouse (Peromyscus polionotus peninsularis)	1	6.3	Establish partnership with Bay and Gulf counties' Environmental Services/ Permitting sections	Not Started			Bay County, U.S. Fish and Wildlife Service, Region 4, Ecological Services, Gulf County	Work type not yet selected	Labor type not yet selected	